WHAT IS CLAIMED IS:

1. A nuclear camera system in which pixel data is scatter corrected prior to image processing comprising:

an acquisition subsystem which acts to acquire counts in the vicinity of a photopeak in multiple energy windows, including a scatter corrector which acts to correct for scatter in real time by mathematically combining the counts of the multiple energy windows; and

an image processor coupled to the scatter corrector which produces an image from scatter corrected count data.

2. The nuclear camera system of Claim 1, wherein the acquisition subsystem acts to simultaneously acquire counts from multiple radionuclides producing emissions at different energy levels.

3. The nuclear camera system of Claim 2, wherein the radionuclide producing emissions at the higher energy level produces background scatter at the photopeak at the lower energy level.

4. The nuclear camera system of Claim 3, wherein the radionuclides are used in a stress study.

5. The nuclear camera system of Claim 4, wherein the radionuclides are Tc and Tl.

6. The nuclear camera system of Claim 3, wherein the radionuclides are used in a lung perfusion study.

7. The nuclear camera system of Claim 6, wherein the radionuclides are Tc and Xe.

8. The nuclear camera system of Claim 1, wherein the act of mathematically combining is an additive process.

9. The nuclear camera system of Claim 1, wherein the act of mathematically combining is a subtractive process.

10. The nuclear camera system of Claim 1, wherein the scatter corrector acts to correct for scatter on a pixel by pixel basis.

11. The nuclear camera system of Claim 1, wherein the multiple energy windows are overlapping.

12. The nuclear camera system of Claim 1, wherein the multiple energy windows occupy adjacent energy channels.

13. A method for performing a nuclear medicine lung perfusion study comprising:

applying a first carrier labeled with a first radionuclide to the blood flow system which becomes distributed in capillaries of the lungs;

applying a second carrier labeled with a second radionuclide to the lungs by inhalation; and

imaging both radionuclides simultaneously with a gamma camera.

14. The method of Claim 13, wherein the first carrier is macro-aggregated albumin.

15. The method of Claim 14, wherein the first radionuclide is Tc.

16. The method of Claim 13, wherein the second carrier is a gas.

17. The method of Claim 16, wherein the second radionuclide is Xe.

18. The method of Claim 13, wherein imaging is performed while the second labeled carrier is being applied.

19. The method of Claim 13, wherein imaging comprises producing a first nuclear image of a radionuclide distributed in a lung on the basis of blood flow; and

producing a second nuclear image of a radionuclide distributed in a lung on the basis of aeration.